Translate each into an algebraic expression.

1) Eight more than a number

2) Double a number subtract 5

3) Three less than one fourth a number

4) Twice a number increased by four

5) The sum of a number and eight decreased by three

Solve the word problems:

6) Four less than 9 times a number is 122. Find the number.

7) Fred and Wilma have a combined annual income of $55,000. If Wilma earns 3000 more than Fred, how much did each of them earn for the year?

8) Porky Pig has a collection of dimes and quarters in his piggy bank. He has 3 more dimes than quarters. If the total in the piggy bank is $3.80, how many of each coin does he have?

9) A rectangle has a width that is 4 feet less than the length. If the perimeter is 52 feet, find the dimensions.

10) A bucket of 68 marbles contains 3 colors. There are twice as many blue marbles as red and four more green marbles than red. How many marbles of each color are there?

Answers:

1) x + 8   2) 2x - 5   3) 1/4 x − 3   4) 2x + 4   5) x + 8 - 3

6) The number is 14

7) Fred earns $26,0000 and Wilma $29,000

8) 10 Quarters and 13 dimes

9) Length is 15 feet, width is 11 feet.

10) 32 blue, 16 red, and 20 green